Claims

1. A semiconductor device comprising:

a semiconductor substrate;

5   at least an active region formed in the semiconductor substrate;

a plurality of isolation regions for separating the active regions each other;

a surface insulating film formed on a surface of the active region of the semiconductor substrate; and

10   a conductive film formed on the surface insulating film, wherein the surface insulating film is formed <u>relatively</u> thin to work as an electric fuse.

2. The semiconductor device according to claim 1, further

15   comprising:

a plurality of surface insulating films formed on a surface of the active region of the semiconductor substrate; said surface insulating films being formed in a different thickness each other; and

a plurality of conductive films formed on each of the surface

20   insulating films;

wherein one of the surface insulating films having smaller thickness is used as an electric fuse.

3. A semiconductor device comprising:

25   a semiconductor substrate;

at least a trench formed in the semiconductor substrate;

a surface insulating film formed along a surface of the trench of the semiconductor substrate; and

a conductive film formed on the surface insulating film.

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4. The semiconductor device according to claim 3, wherein the surface insulating film is formed relatively thin to be broken down

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for forming an electric fuse.

5.   The semiconductor device according to claim 3, wherein the
surface insulating film is formed relatively thin to work as a

5   dielectric film for forming a capacitor.

6.   The semiconductor device according to claim 3, wherein
a plurality of trenches are formed adjacently, and a surface
insulating film and a conductive film are formed in each trench.

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7.   The semiconductor device according to claim 6, wherein
a plurality of trenches are formed adjacently in the active
region, an etching stopper film is embedded in a selected one of the
trenches, and a surface insulating film and a conductive film are formed

15   in other trenches.

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